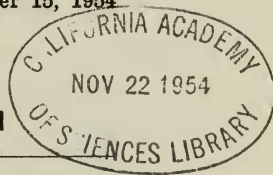


PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON



SIX NEW CALIFORNIA MILLIPEDS

BY RALPH V. CHAMBERLIN

Four of the six new millipeds of which preliminary diagnoses are here given are represented in a collection recently made by Clarence R. Quick, by whom they were sent to me for identification. Occasion is here taken to validate names for a new *Hypozoneum* collected by P. H. Arnaud in 1949 and a new *Klansolus* represented by specimens belonging to the American Museum, specimens that were collected by Cazier, Gertsch and Schromel of that institution. Type of all the species excepting the last named are in the author's collection.

***Klansolus mononus* new species**

Resembling *K. yosemitensis* Chamberlin in having a broad lighter colored dorsal stripe bisected by a median dorsal dark line; legs chestnut or somewhat chocolate colored.

Separated from *yosemitensis* chiefly on the basis of differences in the gonopods of the male, especially in the details of the terminal appendage of the posterior pair. In this the mesoproximal process or spine is nearly straight instead of being strongly curved and smaller and less divergent. In the anterior gonopods the subterminal tooth of the coxal process is relatively smaller and more remote from the apical point or tooth.

Number of segments 77, or near that number.

Diameter, 5 mm.

Locality.—Mono Co.; Leevinning. Two specimens taken July 13, 1952, by Cazier, Gertsch, and Schromel. (American Mus. Coll.).

***Klansolus obscurans* new species**

While adults of this species typically lack the median dorsal light band, or show it vaguely in strong light, young specimens have it distinctly developed and with the usual bisecting dark line.

Otherwise, this species differs from *mononus* in having the mesoproximal branch of the distal appendage of the posterior gonopods with a branch or spur. The anterior gonopods differ, e.g., in the coxal process in having the subapical tooth closer to the apex and relatively much longer than in that species.

Number of segments, 77-79.

Diameter 4.6-5 mm.

Locality.—Butte Co.: Big Bar Mt., 2 to 2½ mi. southwest of Coyote Gap (Faggin's Saddle), Plumas N. F., east of Pulga. Six specimens taken under bark of rotten stump and under wood debris on moist ground, July 1, 1953.

Paeromopus buttensis new species

General color black, but dorsally the metazonites are reddish chestnut, the band of this color narrowing and running out down the sides; head, antennae and legs black.

Segmental sulcus deeply impressed throughout, curving ventrocaudad about the pore and then continuing ventrad directly. Prozonites smooth and the metazonites strongly striate in the usual manner.

In comparison with *P. eldoradus* Chamberlin, which it in general resembles, differing conspicuously in the gonopods; e.g., the larger size of these organs, with the furcate coxal hook of the anterior pair having the proximal branch large and characteristically dentate on the margins instead of being small and smooth. The retrorse barb at distal end of posterior gonopods well developed in the present species while absent or obsolete in *eldoradus*.

Number of segments, 75-81.

Length of male holotype, 145 mm.; diameter, 7.8-8 mm.

Locality.—Butte Co.: Big Bar Mt. Ridge, east of Pulga, 2 to 2½ miles S. W. of Coyote Cap (Fagin's Saddle). El. about 4,000 ft. (?) Three specimens taken July 1, 1953.

Family Polyzoniidae

Genus **CALZONIUM** new

Legs separated by well developed sterna. Head acutely pointed below, conical. Ocelli in two oblique rows which are typically but narrowly separated at the middle. Antennae with sixth article longest, the third next, with the fourth and fifth subequal to each other. Body strongly narrowed from the sixth segment forward. First tergite covering the head from above, less than half the width of the median tergites. Segments numerous, with the body typically ten or eleven times as long as broad.

Generitype.—*Calzonium quicki* new species.

Apparently closest to *Euzonium* with which it differs from the other known genera in possessing well developed sterna, excepting *Buzonium*. It agrees with *Euzonium* and differs from *Buzonium* in the conically pointed head. Whether it agrees with *Euzonium* in having the anal tergite covered by the penult tergite is at present uncertain since these segments are absent from the type of the present genus. The great difference in number of segments and in proportions, the length being ten or more times the width while but four times, or less, in *Euzonium*, seems sufficiently indicative of generic difference.

Calzonium quicki new species

Dorsum orange brown with a narrow yellow stripe over each lateral border; venter and legs yellow; antennae of a dull purplish cast.

Sixth joint of antennae longest, cylindrical; the third but little longer than the fourth and fifth. Ocelli black, their series not far from transverse.

Head fully covered from above by the first tergite which is nearly as long as the succeeding two taken together.

None of the legs crassate.

Number of segments 85 plus two or three missing from caudal end of type.

Length, 38 + mm.; width, 3.9 mm.

Locality.—Mariposa Co.: about $\frac{3}{4}$ mi. N. of Signal Peak, Chowchilla Mt., Elevation about 6,400 ft. One female taken June 20, 1953, under debris on moist ground.

Hypozoneum arnaudi new species

Of nearly the same proportions as recorded for *H. anurum*, but with 35 segments instead of 30. An obvious difference from that species is in the shape of the large penult tergite, the caudal margin of which is widely incurved instead of convex. There are but two definite ocelli in each series in the present species instead of three. The ventral end of the head is more blunt than is represented for *anurum*.

The antennae are purplish and the head has two or three subvertical lines of the same color on each side of the face. The dorsum along the middle dark brown, lighter brown on each side with the lateral border orange and an obscurely lighter stripe on each side of the median brown area. Venter and legs light orange. The legs with their distal joints irregularly blotched with purplish.

Length, 8.8 mm.

Locality.—Santa Cruz Co.: Felton. One female taken Feb. 6, 1949, by P. H. Arnaud.

Family Andrognathidae *Eucybe auctus* new species

Tergites salmon colored excepting the anterior segments which, together with head, antennae and legs are pale yellow to nearly white.

The head elevated, freely exposed, the part below level of insertion of antennae very short, its lower margin convex; head clothed with fine hair points as in *clarus*. Antennae with sixth joint much longer than any other; seventh joint well developed, in the form of a truncate cone.

The collum with well developed keels which are upturned as are those of the other tergites, nearly of same width as the head; tubercles laterally compressed as typical, but these form three transverse series instead of two; the tubercles of caudal row large, those of anterior row small and scarcely compressed, those of the middle series intermediate in size; tubercles in last two series eight in number, those of the anterior series six.

Tubercles of the other tergites with tubercles in two series, those of each series 12 or 10 in number; tubercles not extending upon the keels. Surface of all tergites densely clothed with fine hair points.

Number of segments, 52.

Length, about 15 mm.; body slender.

Locality.—Mariposa Co.: Chowchilla Mt., about $\frac{3}{4}$ mi. N. E. of Signal Peak. Elevation 6,450 ft. Under wood debris on damp ground. One male and two females taken June 20, 1953.